=> D HIS

(FILE 'HOME' ENTERED AT 15:37:24 ON 21 JAN 2005)

FILE 'CAPLUS' ENTERED AT 15:37:49 ON 21 JAN 2005

L1	826	S	SERPINS
L2	0	S	L1 (A) HYBRID
L3	0	S	L1 (A) FUSED
L4	0	S	L1 (A) HYBRID PROTEIN
L5	0	S	L1 (A) FUSION PROTEIN
L6	0	S	L1 (W) FUSION PROTEIN
L7	0	S	SERPINS (W) FUSION PROTEIN
L8	0	S	SERPIN (W) FUSION PROTEIN
L9	6	S	ANTITRYPSIN (W) FUSION PROTEIN
L10	34	S	HUMAN SECRETORY LEUKOCYTE PROTEASE INHIBITOR
L11	0	S	L10 (W) FUSION PROTEIN
L12	2	S	SECRETORY LEUKOCYTE PROTEASE INHIBITOR (W) FUSION PROTEIN

Please scan

=> D l12 1-2 ALL

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:898699 CAPLUS
DN 141:374746
ED Entered STN: 28 Oct 2004
TI Modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy
IN Kadler, Karl; Bulleid, Neil; Ashcroft, Gillian
PA The Victoria University of Manchester, UK
SO Brit. UK Pat. Appl., 59 pp.
CODEN: BAXXDU
DT Patent
LA English
IC ICM C07K014-78
ICS A61K038-39; A61K038-57; A61P017-02; C07K014-81; C07K019-00; C12N015-62
CC 1-12 (Pharmacology)
Section cross-reference(s): 3
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2400852	A1	20041027	GB 2003-24457	20031021
WO 2004094472	A2	20041104	WO 2004-GB1719	20040421

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI GB 2003-9064 A 20030422

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
GB 2400852	ICM	C07K014-78
	ICS	A61K038-39; A61K038-57; A61P017-02; C07K014-81; C07K019-00; C12N015-62
GB 2400852	ECLA	C07K014/78; C07K014/81B1; C12N015/62
WO 2004094472	ECLA	C07K014/78; C07K014/81B1; C12N015/62

AB A modified pro-α chain comprising a triple helix forming domain linked to at least an N-terminal domain which contains a polypeptide from at least part of a laminin glycoprotein or secretory leukocyte protease inhibitor (SLPI). The pro-α chain may form part of a procollagen mol. that has the N-terminal domain retained. Chimeric genes comprising laminin G123-collagen, G3AB-collagen, and SLPI-collagen are described. The procollagen mols. may be incorporated into collagen polymers, matrixes and gels and be used for wound healing and fibrosis gene therapy. The invention provides the sequences of procollagen III α chain-laminin 5 α3 fusion protein and procollagen III α chain-**secretory leukocyte protease inhibitor fusion protein**.
ST procollagen laminin fusion protein sequence wound healing; secretory leukocyte protease inhibitor procollagen fusion sequence; wound healing fibrosis gene therapy procollagen fusion protein
IT Laminins
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(5, fusion with procollagen; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT Skin
(artificial; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Laminins
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fusion with procollagen; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Drug delivery systems
(implants; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Gene therapy
Human
Protein engineering
Wound healing promoters
(modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Fusion proteins (chimeric proteins)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Collagens, biological studies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Protein sequences
cDNA sequences
(of procollagen α chain fusion protein; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Collagens, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(procollagens, V; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Collagens, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(procollagens, XI; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Collagens, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(procollagens, type I; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Collagens, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(procollagens, type II; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Collagens, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(procollagens, type III; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Collagens, biological studies
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(procollagens; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)
IT Protein motifs
(proteinase cleavage site, modification of; modified procollagen

α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT Fibrosis
(treatment of; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT Protein motifs
(triple helix, in procollagen; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT Laminins
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α subunit, globular G1, G2 and G3 domain, fusion with procollagen; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT Laminins
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(α3, fusion with procollagen; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT 782505-36-6 782505-38-8 782505-39-9
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT 122320-05-2, Secretory leukocyte proteinase inhibitor
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fusion with procollagen; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT 68651-94-5, Procollagen N-terminal Proteinase
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(modified procollagen resistance to; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT 782505-35-5 782505-37-7 782505-40-2
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotide sequence; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

IT 782505-44-6 782505-45-7 782505-46-8 782505-47-9 782505-48-0
782505-49-1 782505-50-4 782505-51-5 782505-52-6 782505-53-7
782505-54-8 782505-55-9 782505-56-0 782505-57-1 782505-58-2
782505-59-3 782505-60-6 782505-61-7 782505-62-8 782505-63-9
782505-64-0
RL: PRP (Properties)
(unclaimed nucleotide sequence; modified procollagen α chain fusion protein and their uses in wound healing and fibrosis therapy)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Terumo Kabushiki Kaisha; EP 0985732 A CAPLUS
(2) Victoria Uni; WO 03035692 A CAPLUS
(3) Victoria Uni; WO 9908311

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:487756 CAPLUS
DN 137:57557
ED Entered STN: 28 Jun 2002
TI Fusion proteins of protease inhibitors and their use in treatment of inflammatory disease
IN Barr, Philip J.; Gibson, Helen L.; Pemberton, Philip
PA Arriva Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 134 pp.
CODEN: PIXXD2
DT Patent

LA English
IC ICM C12N015-62
ICS C12N015-15; C07K014-81; A61K038-55; A61K038-57
CC 1-7 (Pharmacology)
Section cross-reference(s): 3, 7
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002050287	A2	20020627	WO 2001-US49256	20011218
	WO 2002050287	A3	20030918		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2430973	AA	20020627	CA 2001-2430973	20011218
	AU 2002041661	A5	20020701	AU 2002-41661	20011218
	US 2003073217	A1	20030417	US 2001-25514	20011218
	EP 1366175	A2	20031203	EP 2001-988344	20011218
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004537970	T2	20041224	JP 2002-552164	20011218
PRAI	US 2000-256699P	P	20001218		
	US 2001-331966P	P	20011120		
	WO 2001-US49256	W	20011218		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2002050287	ICM	C12N015-62
	ICS	C12N015-15; C07K014-81; A61K038-55; A61K038-57
JP 2004537970	FTERM	4B024/AA01; 4B024/AA11; 4B024/BA19; 4B024/CA04; 4B024/CA07; 4B024/DA02; 4B024/DA05; 4B024/DA06; 4B024/DA11; 4B024/DA12; 4B024/EA04; 4B024/GA11; 4B024/HA12; 4B064/AG23; 4B064/CA02; 4B064/CA05; 4B064/CA06; 4B064/CA10; 4B064/CA19; 4B064/CC24; 4B064/DA01; 4B065/AA01X; 4B065/AA57X; 4B065/AA72X; 4B065/AA90X; 4B065/AB01; 4B065/BA02; 4B065/CA24; 4B065/CA44; 4B065/CA46; 4C084/AA01; 4C084/AA02; 4C084/AA07; 4C084/BA02; 4C084/BA22; 4C084/DC32; 4C084/DC34; 4C084/DC50; 4C084/NA14; 4C084/ZA341; 4C084/ZA591; 4C084/ZA941; 4C084/ZC201; 4C084/ZC551; 4H045/AA10; 4H045/AA20; 4H045/AA30; 4H045/BA10; 4H045/BA41; 4H045/CA40; 4H045/DA56; 4H045/EA20; 4H045/EA29; 4H045/FA74

AB Fusion proteins of protease inhibitors are provided, in particular fusion proteins of α1-antitrypsin (AAT) and a second protease inhibitor, such as secretory leukocyte protease inhibitor (SLPI) or tissue inhibitor of metalloproteases (TIMP). Chimeric genes encoding the fusion proteins, and expression vectors and hosts for manufacture of the proteins are also provided. Methods of making the fusion proteins of the invention are also provide, as well as methods of using the fusion proteins, for example to inhibit protease activity in a biol. sample or in the treatment of an individual suffering from, or at risk for, a disease or disorder involving unwanted protease activity. The construction and expression of chimeric genes for a number of fusion proteins is described. Effective inhibition of elastase and tryptase by the fusion proteins is demonstrated.

ST proteinase inhibitor fusion protein inflammatory disease treatment; antitrypsin fusion protein inflammatory disease treatment; **secretory leukocyte protease inhibitor**

fusion protein inflammatory disease treatment; TIMP1 antitrypsin fusion protein inflammatory disease treatment

IT Chimeric gene
RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)

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(FILE 'HOME' ENTERED AT 16:48:29 ON 21 JAN 2005)

FILE 'CAPLUS' ENTERED AT 16:49:21 ON 21 JAN 2005

L1	72	S	SECRETORY LEUKOPROTEASE INHIBITOR
L2	0	S	L1 (A)INTERACTION WITH ELASTSE
L3	4	S	L1 (A) ELASTASE
L4	13	S	ALPHA-1-ANTITRYPSIN INHIBITOR
L5	1	S	L4 (A) ELASTASE
L6	0	S	L4 (A) COMPLEX WITH ELASTASE
L7	0	S	L4 (W)ELASTASE COMPLEX
L8	0	S	ALPHA-1-ANTITRYPSIN INTERACTION (W) ELASTASE
L9	24	S	ALPHA-1-ANTITRYPSIN INTERACTION

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ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1994:318175 CAPLUS

DN 120:318175

ED Entered STN: 25 Jun 1994

TI Functions of the N-Terminal Domain of Secretory Leukoprotease Inhibitor

AU Ying, Qi-Long; Kemme, Michael; Simon, Sanford R.

CS Department of Pathology, State University of New York, Stony Brook, NY, 11794, USA

SO Biochemistry (1994), 33(18), 5445-50
CODEN: BICHAW; ISSN: 0006-2960

DT Journal

LA English

CC 7-3 (Enzymes)

AB Secretory leukoprotease inhibitor (SLPI) comprises two homologous domains: the C-terminal domain contains the reactive site, while the function of the N-terminal domain remains unknown. In order to elucidate the function of the N-terminal domain, the authors studied the kinetics of reactions of human leukocyte elastase with two recombinant forms of SLPI: the full-length inhibitor and the C-terminal domain alone. The reactions of elastase with the full-length inhibitor and the C-terminal domain share the same association rate constant, 2 + 106 M-1 s-1, but the complex formed with the C-terminal domain is less stable, with a dissociation rate constant of 8 + 10-4 s-1, 5 times higher than that of the complex with the full-length inhibitor. The binding of the full-length inhibitor to elastase is greatly accelerated by polyanions. In the presence of submicromolar concns. (1 μg/mL) of heparin, the association rate constant is increased by more than 1 order of magnitude. The binding of the C-terminal domain alone to elastase shows much lower sensitivity to heparin; in the presence of 5 μM (25 μg/mL) heparin, association of the C-terminal domain with elastase reaches a maximum rate of 7 + 106 M-1 s-1, about 3 times higher than the rate in the absence of heparin. Similar differential effects of heparin have been observed on the reactions of α-chymotrypsin with the two recombinant form of SLPI. The authors also found that heparin has only a small effect on the binding of elastase with elafin, an elastase-specific inhibitor homologous to the C-terminal domain of SLPI. These data reveal two previously unrecognized functions of the N-terminal domain: stabilizing the elastase-inhibitor complex and mediating the activation of the inhibitor by heparin.

ST secretory leukoprotease inhibitor N terminus function; **elastase secretory leukoprotease inhibitor** N terminus; heparin secretory leukoprotease inhibitor N terminus

Please scan

NSWER 19 OF 58 MEDLINE on STN
AN 97431610 MEDLINE
DN PubMed ID: 9287115
TI A multifunctional protein: involvement of the alpha-1 serum **protease inhibitor** in SDS and high salt-stable DNA-protein complexes.
AU Glaser T; Rothbarth K; Stammer H; Kempf T; Spiess E; Werner D
CS Division Biochemistry of the Cell (0225), German Cancer Research Center, Heidelberg.
SO FEBS letters, (1997 Aug 11) 413 (1) 50-4.
Journal code: 0155157. ISSN: 0014-5793.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199710
ED Entered STN: 19971224
Last Updated on STN: 19971224
Entered Medline: 19971030

L18 ANSWER 20 OF 58 MEDLINE on STN
AN 97389655 MEDLINE
DN PubMed ID: 9246791
TI The influence of various insect cell lines, p10 and polyhedrin promoters in the production of secreted insulin-like growth factor-interleukin-3 chimeras in the baculovirus expression system.
AU DiFalco M R; Bakopanos E; Patricelli M; Chan G; Congote L F
CS Endocrine Laboratory, Royal Victoria Hospital, Montreal, Canada.
SO Journal of biotechnology, (1997 Jul 23) 56 (1) 49-56.
Journal code: 8411927. ISSN: 0168-1656.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Biotechnology
EM 199708
ED Entered STN: 19970902
Last Updated on STN: 19970902
Entered Medline: 19970821

Scan

(FILE 'HOME' ENTERED AT 12:16:18 ON 21 JAN 2005)

FILE 'MEDLINE, LIFESCI, CANCERLIT' ENTERED AT 12:17:13 ON 21 JAN 2005

L1	2	S	MULTIFUNCTIONAL PROTEASE INHIBITORS
L2	0	S	FUSION PROTEASE INHIBITORS
L3	0	S	FUSION PROTEIN(A) PROTEASE INHIBITOR
L4	0	S	FUSION PROTEIN (A) ALPHA 1-ANTITRYPSIN
L5	264	S	SECRETORY LEUKOCYTE PROTEASE INHIBITOR
L6	0	S	L5 (A) FUSION PROTEIN
L7	0	S	L5 (A) CHIMERA
L8	0	S	MULTIFUNCTIONAL FUSION PROTEIN
L9	0	S	FUSION PROTEIN (A) MULTIFUNCTIONAL
L10	0	S	ATT (A) SLPI
L11	4433	S	ATT
L12	0	S	L11 (A) FUSION PROTEIN
L13	0	S	L11 (A) CHIMERA
L14	34071	S	FUSION PROTEIN
L15	0	S	L14 (A) MULTIFUNCTIONAL
L16	0	S	L14 (A)PROTEASE INHIBIT
L17	13001	S	PROTEASE INHIBITOR
L18	58	S	L14 AND L17
L19	39	S	HUMAN SERPIN
L20	0	S	L19 (A) CHIMERIC
L21	0	S	L19 (A) FUSION
L22	0	S	FUSED HUMAN SERPIN
L23	0	S	FUSION PROTEIN (A) HUMAN SERPIN
L24	0	S	RECOMBINANT HUMAN SERPIN
L25	20		DUPLICATE REMOVE L19 (19 DUPLICATES REMOVED)
L26	0	S	ENGINEERED HUMAN SERPIN
L27	0	S	MULTIFUNCTIONAL HUMAN SERPIN
L28	0	S	FUSED HUMAN SERPIN
L29	0	S	FUSED SLPI
L30	0	S	FUSED AAT
L31	0	S	RECOMBINANT HUMN SERPIN
L32	0	S	HUMAN SERPIN (A) FUSION PROTEIN